

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-17. (Cancelled)

18. (Currently Amended) A medical device configured to be guided to a target location in anatomy, the medical device comprising:

a first tubular member having a proximal end and distal end;

a core wire extending proximally from said first tubular member, said core wire being attached with a joint to said first tubular member at least at said proximal end, said joint comprising:

a radiopaque marker coil circumscribing said core wire, said marker coil being at least partially inside first said tubular member, wherein the marker coil is formed by edge winding into a coil a radiopaque wire having a substantially non-circular cross section with a greater dimension in the radial direction than in the axial direction, wherein prior to edge winding, said wire has two substantially flat opposite non-parallel sides that are out of parallel by an angle, wherein the process of edge winding the wire into the coil causes the sides to become substantially parallel, and

at least one of solder and adhesive; and

~~The medical device of claim 7,~~ said first tubular member having a chamfer at said proximal end.

19-24. (Cancelled)

25. (Previously Presented) A medical device with a stepped core wire configured to be guided to a target location in anatomy, the medical device comprising:

a tubular member having a proximal end and a distal end and a plurality of slots configured to make said tubular member more flexible in bending; and

a core wire having a proximal section extending proximally from said tubular member, and a distal section located at least partially inside said tubular member, said core wire comprising an abrupt change in cross-sectional dimension between said proximal section and said distal section;

said core wire being attached to said tubular member at least at said proximal end, said proximal end abutting said abrupt change in cross-sectional dimension; and

a radiopaque marker coil circumscribing at least a portion of said core wire, wherein the coil is formed by edge winding into a coil a radiopaque wire having a substantially non-circular cross section, wherein the substantially non-circular cross section has a greater dimension in the radial direction than in the axial direction.

26. (Cancelled)

27. (Previously presented) The medical device of claim 25, said coil being soldered to said core wire, said tubular member being attached at least to said coil with adhesive.

28-52. (Cancelled)

53. (Previously Presented) A medical device configured to navigate through anatomy, the medical device comprising:

a tubular member having a proximal end, a distal end, and a longitudinal axis extending at least from the proximal end to the distal end, the tubular member comprising a plurality of slots configured to make it more flexible in bending;

a core wire disposed at least partially within said tubular member and extending proximal therefrom, said core wire having a distal tip;

a joint attaching said core wire to said tubular member at said proximal end of said tubular member;

at least one piece of radiopaque material inside said tubular member, at or adjacent to said distal end of said tubular member; and

said radiopaque material being a helical radiopaque marker coil made by edge winding a wire having a substantially non-circular cross section, wherein the substantially non-circular cross section has a greater dimension in the radial direction than in the axial direction.

54. (Withdrawn) The medical device of Claim 53, at least a plurality of said slots being substantially perpendicular to said axis, said slots being formed in a plurality of groups, at least a plurality of said groups comprising a plurality of slots at substantially the same location along said axis, and wherein at least some said groups, at least one said slot is substantially deeper than at least one other said slot.

55. (Previously presented) The medical device of claim 53, said wire having a substantially greater dimension in the radial direction than in the axial direction after being formed into said coil.

56. (Withdrawn) The medical device of Claim 53 further comprising a mesial coil proximal to said radiopaque material.

57. (Withdrawn) The medical device of Claim 53, said tubular member extending distally from said distal tip of said core wire, said radiopaque material being distal to said distal tip of said core wire.

58. (Original) The medical device of claim 53, said core wire further being attached to said tubular member at said distal tip of said core wire.

59. (Original) The medical device of claim 53, said core wire having at least one abrupt change in cross-sectional dimension, said abrupt change being at or adjacent to said joint.

60-81. (Cancelled)

82. (Previously presented) The medical device of claim 25, wherein the wire having a substantially non-circular cross section has two substantially flat opposite non-parallel sides that are out of parallel by an angle prior to forming the coil.

83. (Previously presented) The medical device of claim 82, wherein the sides become substantially parallel when the wire is wound into the coil.

84. (Previously Presented) The medical device of claim 82, wherein the wire has a substantially isosceles trapezoidal cross section prior to forming the coil and a substantially rectangular cross section after forming the coil.

85. (Previously Presented) The medical device of claim 53, wherein prior to edge winding the wire into a coil, the wire having a substantially non-circular cross section has two substantially flat opposite non-parallel sides that are out of parallel by an angle.

86. (Previously Presented) The medical device of claim 85, wherein the process of edge winding causes the sides to become substantially parallel when the wire is wound into the helical coil.

87. (Previously Presented) The medical device of claim 85, wherein the wire has a substantially isosceles trapezoidal cross section prior to forming the helical coil and a substantially rectangular cross section after forming the helical coil.